Instructor: Mr. Thomas Luckner
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CRN: 22536
Office: 122B
Section: 012
Office Hours: TR 2-3, 5:40-6:40
Class Meeting Room & Time: MW 5:30-6:20pm, TR 4:25-5:40pm in LC 115

COURSE DESCRIPTION AND OBJECTIVES

Prerequisites: C or better in MATH 111or 111I, or placement through Precalculus version of the Mathematics Placement Test

Learning Outcomes: Upon successful completion of the course, students should be able to:

1. Increase their skills with algebra and trigonometry.
2. Work with mathematical terms such as linear, quadratic, exponential, logarithmic, inverse polynomial, rational, circular, and trigonometric functions and express these terms in correct context.
3. Apply the methods of algebra to solve applications involving intercepts, rates of change, inequalities, system of equations, rational functions, and interest growth.
4. Develop various properties graphically and formulaically (domain, range, inverse functions, unit circle, Pythagorean identities, reciprocals, half-angle, and double-angle, and transformations).
5. Students will tackle problems that require more than one step to solve.

REQUIRED MATERIALS

- **Textbook**: The textbook for this course is Precalculus 2nd Custom Edition for USC, Mark Dugopoloski ISBN: 1-269-74815-7.

- **Online Materials: WE WILL NOT BE USING ONLINE MATERIAL!** Other sections of the course may be using an online system called MyMathLab, but I have found that this system is frustrating for you students and thus all homework will be assigned in class (also shown on Blackboard) and will be turned in before class or on Blackboard as informed by the instructor.

- **Calculator**: A calculator will NOT be allowed for use in class assignments such as worksheets, assessments, quizzes, exams, homework, or any other assignment unless the instructor deems it acceptable.

COURSE POLICIES AND EXPECTATIONS

Attendance: Attendance is expected and will be recorded via attendance sheet passed out at the beginning of class. Note this means if you are late (NO MORE THAN 15 MINUTES) and miss the attendance sheet, it is YOUR responsibility to come to the instructor after class to sign in without penalty. Absences are broken down into 2 categories:

Excused-Athletic, military, illness, family illness or death, legal, professional obligation (WITH VALID DOCUMENTATION)

Unexcused-no documentation, does not include issues above

Absence from more than 10 percent of the scheduled class sessions, whether excused or unexcused, is excessive and the instructor will drop the final grade of a student one letter grade (10 percentage points) if this is the case (ex: A to B, B to C, etc.). For this class 10 percent means you can miss class 5 times before a penalty is added.

Participation: All members are expected to participate during class and may be called upon to respond to classroom discussions.
All participants are expected to show respect to other students, the instructors, and any guests who may be visiting the class during the year (Golden Rule).
If a grade is borderline, participation will be a key factor in determining the final grade (ex: good attendance and borderline C+/B will lend to a B).

Cell Phones: Cell phones are to be **off and away** during class. If one is caught with their phone out or in use, a warning will be given first. If the student is caught with their phone out a second time, the phone will be confiscated by the instructor after the student powers down the phone and left in the front of the classroom. The student can then have the phone after class is over

Laptops: Since math is a difficult subject to type notes for, I will expect all laptops to be **put away and not in use** during class. If a student has a laptop out, they will be asked to put it away. **However**, if a student demonstrates a need and/or an ability to use a laptop for notes to the instructor, an exception will be made.

Other Technology/Objects: Technology such as smart watches are to be taken off during assessment and are not to be used during class for anything other than necessities (such as time). If a student prefers to take notes via tablet, inform the instructor that this is your preferred way to take notes. During assessments, the instructor will ask for hats with bills to be removed and an I.D. be presented to deter cheating. This will be discussed in more detail in assessment part of syllabus. If you have any questions about what can or cannot be used during class, do not be afraid to ask the instructor.

Academic Integrity: I expect you to familiarize yourself with the Honor Code found in the current student handbook. Keep in mind that "Any student who violates this Honor Code or who knowingly assists another to violate this Honor Code shall be subject to discipline." Honor Code & Carolina Creed: https://www.sa.sc.edu/creed/

Students with Disabilities: Students who would like to request accommodations for disabilities must talk to me as soon as possible (after class or during office hours). Students must register with the Office of Student Disability Services (LC 112A) before I can make any accommodations.

Studying: This class meets four times a week for lecture for 50 minutes twice a week and 75 minutes twice a week. It is **very** important that you study at least 2-3 hours out of class for every hour within class. Study techniques, but not all, include: reading the book or doing homework problems over again or other online sources. (Most topics we cover can be googled for example problems. Just google the topic and then the word exercises after.)

Late/Make-Up Policy: Exams can be made up **ONLY** in the case of an emergency, and **ONLY** if you request a make-up exam before the scheduled time. It is your responsibility to contact me within a reasonable time to request a make-up exam. If a student misses an in-class assignment with an excused-absence (quiz, in-class assessment, etc.), then the above also applies.

ASSIGNMENTS

Homework: HOMEWORK IS THE MOST IMPORTANT PART OF THIS CLASS!!!! Homework will be assigned on a regular basis, and due regularly. All assignments will be completed offline. The homework sets will be announced at the beginning or end of class. If you have questions, please email me. Homework is supposed to help you learn the material and, thus, asking questions is highly encouraged. This will help you not fall behind as the course will move quickly. It is your responsibility to work through the homework problems in their entirety in order to gain mastery of the material. Students are encouraged to work together on homework, but each student must personally submit his or her own solutions IN HIS OR HER OWN WORDS. Otherwise, this is a form of cheating. Late homework will **NOT** be accepted.

Quizzes: Quizzes will be given every Monday or Thursday (This will be decided by class) in the last 20-25 minutes of class unless there is an exam the day of or day before the quiz, extra work is needed on the section being assessed (decided by instructor), or the instructor deems it necessary. If there are more than 10 quizzes, your 2 lowest will be dropped. If there are between 8-10 quizzes, your lowest is dropped. No in-class assessment will be given the last week of classes.

Exams: There will be three exams, whose dates will be announced in class at least one week in advance (May change from calendar due to class cancelations). Calculators will NOT be allowed on exams unless otherwise stated by instructor.

Final Exam: The final exam is cumulative and will be taken in-class. ***Final Exam, Tuesday, December 10, 2019, in LeConte 115 from 4 pm to 6:30 pm.*** Will give the official date when known. Do not plan on leaving town before this day.

EVALUATION

Homework and Participation… 20%

Quizzes 15%
Exam 1.....15%
Exam 2.....15%
Exam 3.....15%
Cumulative Final 20%

Final Grades will use the following scale

A	B+	B	C+	C	D+	D	F
100-90%	89-86%	85-80%	79-76%	75-70%	69-66%	65-60%	<60%

USEFUL WEBSITES:

- Blackboard Website: https://blackboard.sc.edu
- Software Support for Calculations: http://www.wolframalpha.com/ or http://www.khanacademy.org/
- Good app to use for notes and handouts, "Notability"

SUPPORT:

- My Office Hours (top of page 1)
- FREE TUTORING In LC 105 - *Check room, but usually Monday-Thursday 10am-3pm.*
- Student Success Center – Offers FREE tutoring and FREE 1 on 1 ONLINE tutoring. (http://www.sa.sc.edu/ssc/)

Hint for making learning easier: *Get to class 15 minutes early, read the book's description of today's lesson (Can determine this by looking at homework or can ask instructor). By seeing the material ahead of time, you can help make the learning curve with the new material manageable.*

Hint for making studying for exams easier: *When you complete a homework problem or a problem in class, don't simply move on to the next problem, but ask yourself two questions: (1) How could this show up on an exam? (2) What common mistake might I make with this problem on an exam? Do this with EVERY homework problem.*

Important Dates:

- 08/28/2019 Last day for students to DROP without a grade of "W".
- 11/06/2019 Last day for students to DROP or withdraw without a grade of "WF".
  Schedule is tentative and subject to change

Date	Sections Covered	Topics
8/22	P.1	Syllabus, Real Numbers and Their Properties
8/26-8/29	P.2, P.3, P.4, P.5	Integral Exponents and Scientific Notation, Rational Exponents and Radicals, Polynomials, Factoring Polynomials
9/3-9/5 (No class 9/2)	P.6, 1.1, 1.2	Rational Expressions, Equations-Linear, Rational, Absolute Value, Constructing Models for Problem Solving
9/9-9/12	8.1, 8.2, 2.1, 2.2	Systems of Linear Equations in Two Variables, Systems of Linear Equations in Three Variables, Functions, Graphs of Relations and Functions
9/16-9/19	Review, Test 1, 1.3, 1.4	**Test 1: September 17, 2019 (P.1-P.6, 1.1, 1.2, 8.1, 8.2, 2.1, 2.2),** Equation for a Circle and Distance Formula, Linear Equations in Two Variables
9/23-9/26	2.3, 2.4, 2.5	Families of Functions, Transformations, Symmetry, Operations with Functions, Operations with Functions, Inverse Functions
9/30-10/3	3.1/1.5, 3.2, 3.3, 3.4	Quadratic Equations, Zeros of Polynomial Functions, Multiplicity and Conjugates, Graphs of Polynomial Functions
10/7-10/9 No class 10/10 and 10/11	3.5, 4.1, 4.2	Rational Functions and Inequalities
10/14-10/17	4.1, 4.2, 4.3, 4.4	Exponential Functions and Their Applications, Logarithmic Functions and Their Applications, Rules of Logarithms, More Equations and Applications Review, **Test 2: October 17, 2019 (1.3-1.5, 2.3-2.5, 3.1-3.5, 4.1-4.4)**
10/21-10/24	Review, Test 2, 5.1, 5.2	Review, **Test 2: October 22, 2019 (1.3-1.5, 2.3-2.5, 3.1-3.5, 4.1-4.4),** Angles and Their Measurements, The Sine and Cosine Functions
10/28-10/31	5.3, 5.4, 5.5	The Graphs of the Since and Cosine Functions, The Trigonometric Functions and Their Graphs, The Inverse Trigonometric Functions
11/4-11/7	5.6, 6.1, 6.2, 6.3	Right Triangle Trigonometry, Basic Identities, Verifying Identities, Sum and Difference Identities
11/11-11/14	6.4, 6.5, 7.1, 7.2	Double Angle and Half Angle Identities, Product and Sum Identities, The Law of Sines, The Law of Cosines
11/18-11/21	Review, Test 3, 11.1	Review, **Test 3: November 19, 2019 (5.1-5.6, 6.1-6.5, 7.1, 7.2),** Sequences and Arithmetic Sequences
11/25, 11/26 Thanksgiving rest of week	7.6, 11.2, 11.3	Polar Equations, Series and Arithmetic Series, Geometric Sequences and Series
12/2-12/5	Derivatives intro, Reviews	Definition of Derivative (Not on Final), Final Reviews and built in time